

Title (en)

Companing current-mode transconductor-C integrator

Title (de)

Kompandierender strombetriebener Integrator mit kapazitivem Steilheitsmultiplizierer

Title (fr)

Intégrateur compresseur/expandeur en mode de courant avec transconducteur capacitif

Publication

**EP 0479374 B1 19970903 (EN)**

Application

**EP 91202493 A 19910926**

Priority

NL 9002154 A 19901004

Abstract (en)

[origin: EP0479374A1] In a current-mode transconductor-C integrator the non-linearity of the voltage-to-current conversion of a transconductor (17) is corrected by means of a differentiator (3) which supplies a current (id) which is proportional to the derivative of a current (if), which is proportional to the transconductor output current (iout), with respect to the transconductor control voltage (v), which current (id) is divided by means of a current divider (9) into an input current (iin) and is applied as a quotient current (iq) to an integrating capacitor (13) across which a voltage (v) is built up, which voltage is converted into an output current (iout) by the transconductor. This results in an output current (iout) which is linearly proportional to the integral of the input current (iin) without distortion caused by the non-linear voltage-to-current characteristic of the transconductor (17). <IMAGE>

IPC 1-7

**G06G 7/184**

IPC 8 full level

**G06G 7/184** (2006.01)

CPC (source: EP KR US)

**G06G 7/184** (2013.01 - EP KR US)

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

**EP 0479374 A1 19920408; EP 0479374 B1 19970903**; DE 69127524 D1 19971009; DE 69127524 T2 19980226; JP H04230588 A 19920819; KR 920008587 A 19920528; NL 9002154 A 19920506; US 5189321 A 19930223

DOCDB simple family (application)

**EP 91202493 A 19910926**; DE 69127524 T 19910926; JP 25660291 A 19911003; KR 910017382 A 19911001; NL 9002154 A 19901004; US 76689091 A 19910927